

REMARKS:

This communication is in response to the detailed Office Action mailed October 29, 2004. Accordingly, Applicant has amended paragraph [0029] of the specification, amended claims 1, 3-6, and 8, and canceled claims 2 and 7. Applicant also has added new claims 9-12. The Examiner's comments and rejections are addressed below:

Specification Amendment

Paragraph [0029] was amended to correct an inadvertent typographical error, so no new matter was introduced. In the third sentence of Paragraph [0029], which describes the second planetary gear set, the last item was called "a first ring gear R2," whereas the other items in the sentence were described as "a second sun gear S2" and "a second carrier PC2." One will immediately recognize that the word "first" was a typographical error. Accordingly, Applicant has changed it to "a second ring gear R2," which is consistent with the rest of the sentence.

35 U.S.C. §112, ¶2 Rejection

The Examiner rejected claims 1-8, under 35 U.S.C. § 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. More specifically, the Examiner stated that the claims contain inaccuracies, such that the claimed arrangements among the claimed elements do not correspond to the disclosed invention in the specification and that different claim recitations conflict with each other. However, the rejections are respectfully traversed, in light of the amendments.

Applicant has amended independent claims 1 and 6 to recite a powertrain of an automatic transmission where the second operational element is fixedly connected to the ninth operational element, the third operational element is variably connected to eighth operational element via a second clutch, the fifth operational element is always stationary, the sixth operational element is variably connected to the seventh operational element via a first clutch, and the seventh operational element is subject to a stopping operation of a second brake. The amendment to these claims help clarify the relationship of the claim elements by re-labeling the order of the operational elements in a logical flow that corresponds to the

straight sequence as they are listed in Paragraphs [0029] to [0031] and FIG. 1, while connecting the operational elements accurately to each other. For example, one can identify the first operational element is the first sun gear (S1), the second operational element is the first pinion carrier (PC1), and the third operational element is the first ring gear (R1) by following the sequence in which they are cited in the first planetary gear set description in paragraph [0029] and the sequence of the corresponding items indicated on FIG. 1. The same logic now applies to the corresponding operational elements of the second planetary gear set and third planetary gear set. Moreover, the correspondence of the claim elements to the specification show that there is support for the amendments.

Furthermore, the identity of the operational elements also can be ascertained and supported through the described relationship in claims 1 and 6. For example, the first operational element being fixedly connected to the fourth operational element and receiving an input torque now makes sense with the current amendment because one can follow the description of the first and second sun gears (S1 and S2) in Paragraph [0030] and FIG. 1 to see how they are connected to the input shaft, which one of skill in the art would associate it with a turning movement that would inherently have a torque associated with the turning movement.

To correct labeling errors, dependent claim 3 has been amended to recite “the first and third planetary gear sets are single pinion planetary gear sets” and “the seventh, eighth, and ninth operational elements are respectively a sun gear, a carrier, and a ring gear of the third planetary gear set.” Dependent claim 4 has been amended to recite “the second planetary gear set is a double pinion planetary gear set” and “the fourth, fifth, and sixth operational elements are respectively a sun gear, a carrier, and a ring gear of the second planetary gear set.” Dependent claim 5 has been amended to become a dependent of claim 1, now that claim 2 has been cancelled. These amendments rectify the confusion between the claim elements and their arrangements, as well as removing any conflicting limitations, making it easier to connect the claim elements with the specification by following FIG. 1 and Paragraphs [0029] to [0031].

Therefore, based on the foregoing, Applicant respectfully request the Examiner to remove the § 112 rejection and allow the claims.

35 U.S.C. § 102(e) Rejection

The Examiner rejected claims 1-8, under 35 U.S.C. § 102(e), as being anticipated by U.S. Patent No. 6,736,750 ("Lee"). However, Applicant respectfully traverses this rejection, in light of the amendments.

Lee teaches a power transmission having three planetary gear sets and six torque-transmitting mechanisms (Abstract). Starting from the side with the three inputs shafts being connected to the starting device and engine, the first planetary gear set is continuously interconnected, in the following order, with a member of the second planetary gear set and a member of the third planetary gear set (Abstract; Figure 27). Each planetary gear set has a sun gear, a planet (or pinion) carrier, and a ring gear. The second planetary gear set is a double pinion type, which relates to a stationary planet carrier (col. 31, lines 59-64; Figure 27). Because the Lee specification does not explicitly state this and there are illustrative differences of the other planetary carriers from Figure 27, one can infer that the first and third planetary gear set in Lee are a single pinion type, which is what the Examiner has deduced as well (page 5 of the Office action). In other words, the gear set with the double pinion is in the middle of the power transmission arrangement, surrounded on each side by a gear set with a single pinion.

In contrast, independent claims 1 and 6 of the present application provide a powertrain of an automatic transmission system that is entirely distinguishable from Lee because the connections of the operational elements in claims 1 and 6 are radically different than the connections of comparable operational elements taught by Lee. For example, Lee teaches that the first planetary gear set's ring gear is connected to the sun gear of the second planetary gear set that is then connected to the third planetary gear set's planet carrier via a torque transmitting mechanism (Figure 27), while claims 1 and 6 only recite the third operational element (first ring gear) variably connecting to the eighth operational element (third pinion carrier). Lee's first planetary gear set's planet carrier is connected to the third planetary gear set's planet carrier, via another torque transmitting mechanism (Figure 27), whereas the second operational element (first pinion carrier) in claims 1 and 6 connect to the ninth operational element (third sun gear). Lee's third planetary gear set's planet carrier is also connected to a final drive mechanism (Figure 27), but claims 1 and 6 do not provide such a limitation through the eighth operational element (third pinion carrier). Lee's first planetary gear set's sun gear is connected to yet another torque transmitting mechanism and also to the

sun gear of the third planetary gear set (Figure 27), while the first operational element (first sun gear) of claims 1 and 6 connect to the fourth operational element (second sun gear). Finally, the ring gear of Lee's second planetary gear set is connected to the ring gear of the third planetary gear set (Figure 27), whereas the sixth operational element (second ring gear) of claims 1 and 6 variably connect to the seventh operational element (third sun gear).

As one can see, none of the connections taught by Lee matches the connections of the operational elements recited in claims 1 and 6. This mismatch of connections occurs because the present application has the planetary gear set with a double pinion located after the two planetary gear sets with a single pinion, which is recited in claim 5, whereas Lee has the planetary gear set with the double pinion surrounded on each of its side with a planetary gear set with a single pinion. This difference in planetary gear set arrangements alone accounts for the total difference in the connection of operational elements.

Thus, Lee does not anticipate independent claims 1 and 6, or their respective dependents, claims 3-5 and 8, and Applicant, therefore, respectfully requests that the Examiner withdraw this rejection and submit these claims for a condition of allowance.

New Claims

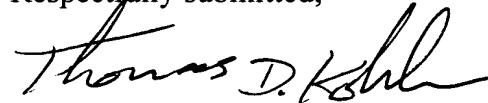
Applicant has added new claims 9-12, which Applicant believes is distinct over Lee. They recite the connections of sun gears, pinion carriers, and ring gears that are entirely different than Lee's teachings for the reasons stated above. Therefore, Applicant respectfully request that the Examiner accept these claims under a condition of allowance.

Conclusion

In light of the present amendments and the above arguments, the Applicants believe claims 1, 3-6, and 8 are now allowable and the rejections moot. Should the Examiner have any continuing objections or concerns, the Examiner is respectfully asked to contact the undersigned at 415-442-1106 in order to expedite allowance of this case. Authorization is granted to charge any outstanding fees due at this time for the continued prosecution of this matter to Morgan, Lewis & Bockius LLP Deposit Account No. 50-0310 (matter no. 060944-0134).

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Respectfully submitted,


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